

181 OLD SPRINGS ROAD
ANAHEIM, CA 92808
(714) 279-6555

*NOTE: In the interest of public safety and maintenance the Park Projects Inspector shall have the authority to revise the tree quantities and locations shown on approved plans based upon field conditions found at the time of installation of the trees.

WESTERN MUNICIPAL WATER DISTRICT

[Signature]

APPROVED BY _____

September 9, 2003

DATE: _____

APPROVAL OF PROPOSED WATER METER
LOCATION, SIZE AND WATERING PROPOSED.



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



JOB #03105

3612 MISSION INN AVE
RIVERSIDE, CALIFORNIA
92501
(909) 781-1930
LIC. #1512
FAX (909) 686-8081

CONTACT: CAMILO ARELLANO

SHEET	DESCRIPTION
L-1	TITLE SHEET
L-2	IRRIGATION PLAN
L-3	IRRIGATION PLAN
L-4	IRRIGATION PLAN
L-5	IRRIGATION DETAILS
L-6	IRRIGATION SPECIFICATIONS
L-7	PLANTING PLAN
L-8	PLANTING PLAN
L-9	PLANTING PLAN
L-10	PLANTING DETAILS
L-11	PLANTING SPECIFICATIONS

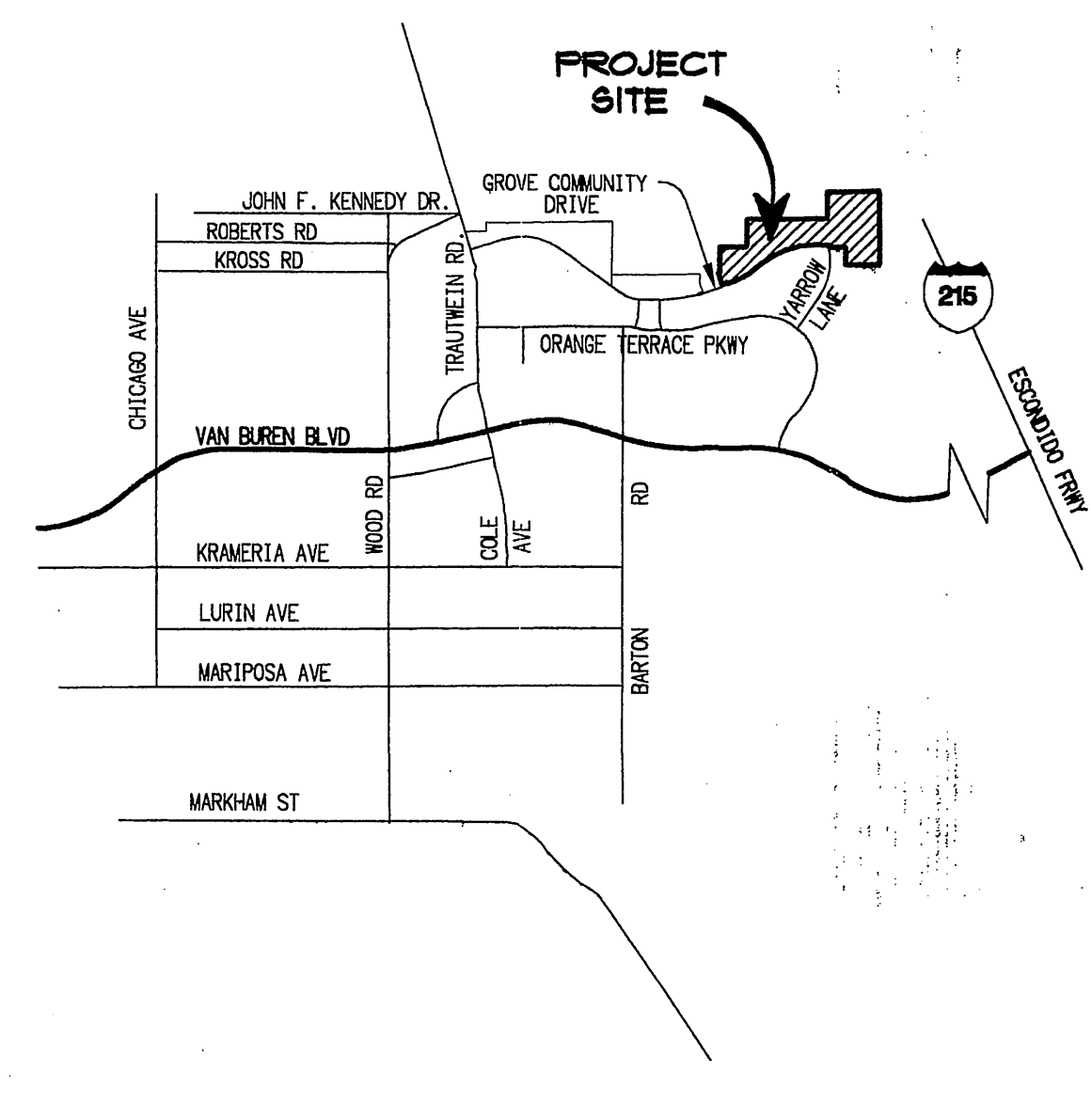
CONSULTANT / TEAM

MDS CONSULTING
17320 Redhill Avenue, Suite 350
Irvine, CA 92614
(949) 251-8821
Contact: Trevor Dodson

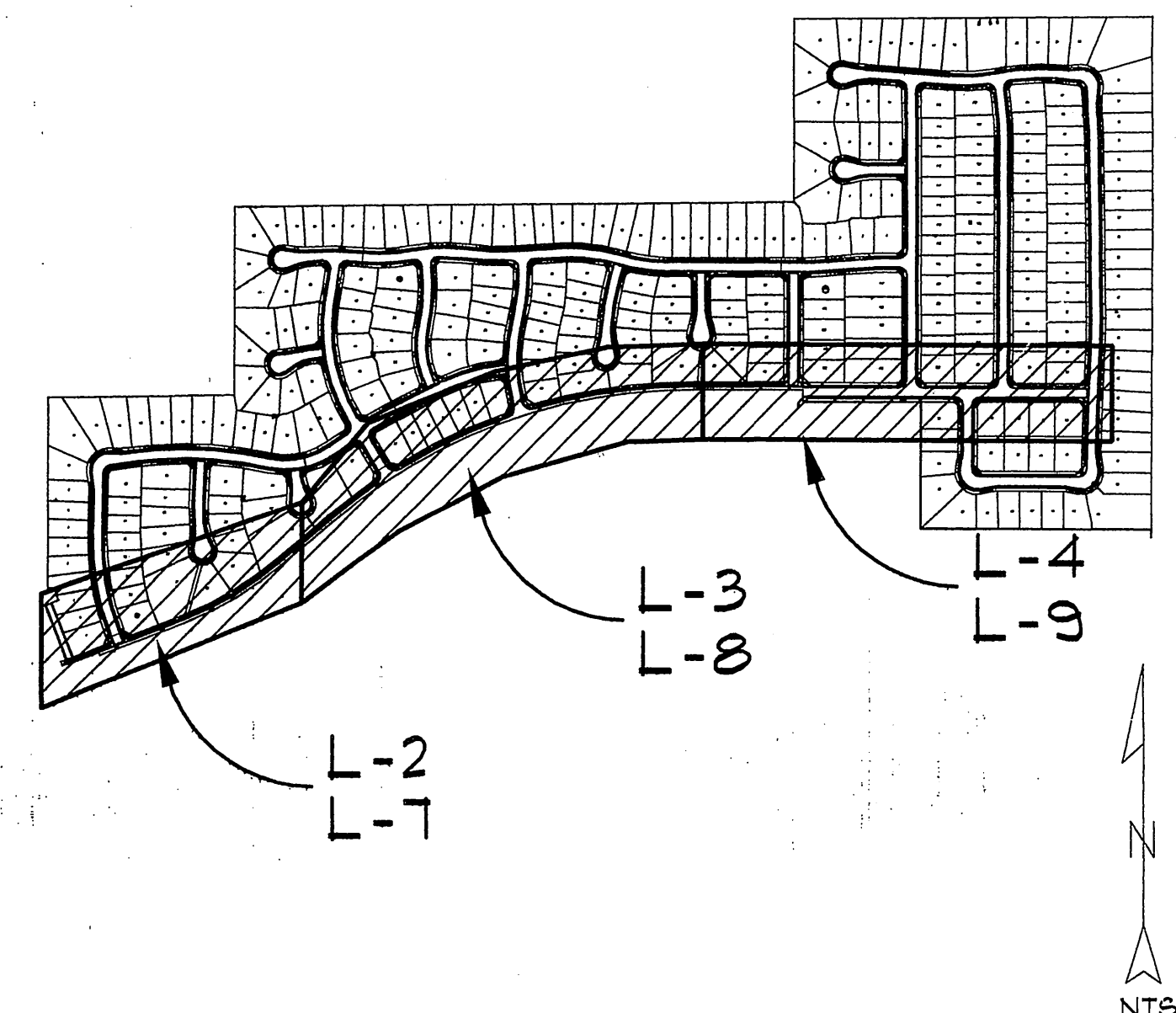
REVISIONS

[illegible]

VICINITY MAP



KEY MAP



BENCHMARK:
CITY OF RIVERSIDE BENCHMARK ?.
?
?
?
ELEVATION = ?

ELEVATION = ?

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE	APPROVED BY
DEPUTY P.W. DIRECTOR			<i>Don Burt</i> PUBLIC WORKS DIRECTOR
PRINCIPAL ENGINEER	<i>W</i>	<i>10/11/13</i>	
CHIEF P.W. INSPECTOR			<i>10/18/13</i> DATE
STREET SERVICES			
SURVEYOR			
TRAFFIC DIVISION			
PARKS DEPARTMENT	<i>W</i>	<i>10/16/13</i>	

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B

TITLE SHEET

HORIZ. SCALE: NTS VERT. SCALE: NTS

ACCT NO

PLAN NO:

R-3071-L
ET **1** OF **11**

DRAWING: L-1

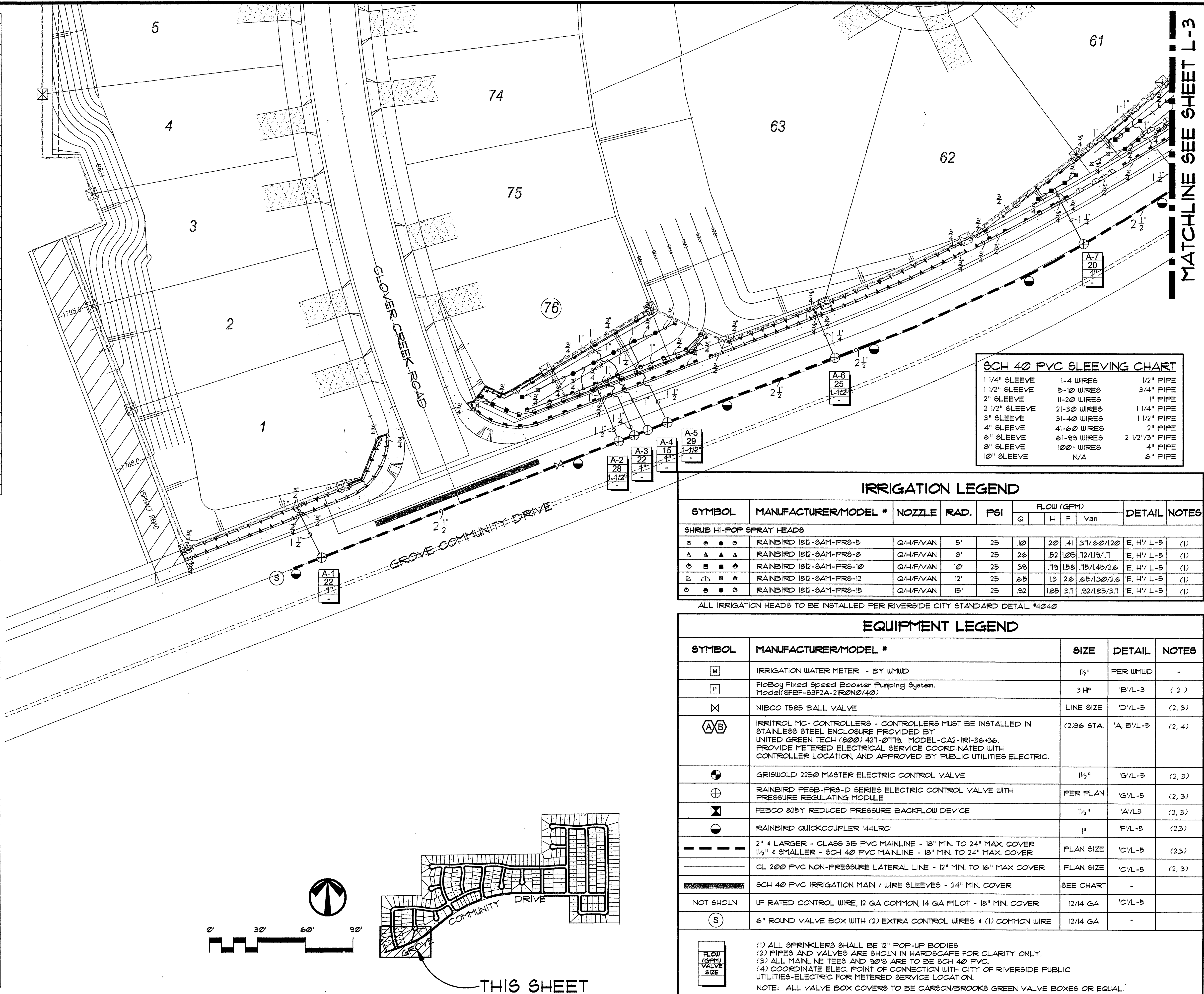
INDEXED 10-15-03 Lfh

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P03-0556 / PC-4397-R

								SUMMER (Jun., Jul., and Aug.)	
Project Name:		OrangeCrest Tract 30717				Water meter Number:		1	
Designer Name:		DB				Reclaimed / Potable:		P	
Date Prepared:		37868							
Evapotranspiration Rates:		Plant Factors (% of ETo):				Irrigation Efficiency (%):			
Historical:	55.45	In. / Yr.			Turf:	0.8	Stream Rotors:		0.75
Seasonal:	22.08	In.	Low Water Use Shrubs:		0.3	Spray Heads:		0.65	
Seasonal:	1.70	In. / Wk.	Medium Water Use Shrubs:		0.4	Bubbler Heads:		0.85	
			High Water Use Shrubs:		0.5	Drip Systems:		0.90	
Controller Letter:		A							
VALVE	FLOW IN	PLANT	PRECIP.	IRRIG.	MAX.	IR/WK	IR/WK	CYCLES	GALLONS
NUMBER	GPM	FACTOR	RATE	EFFIC.	MIN./CYCLE	INCHES	MINUTES	PER WK	PER WK
1	22	0.6	1.60	0.65	4	1.57	59	16	1,293
2	28	0.6	1.60	0.65	4	1.57	59	16	1,646
3	22	0.6	1.60	0.65	4	1.57	59	16	1,293
4	15	0.6	1.60	0.65	4	1.57	59	16	882
5	29	0.6	1.60	0.65	4	1.57	59	16	1,705
6	25	0.6	1.60	0.65	4	1.57	59	16	1,470
7	20	0.6	1.60	0.65	4	1.57	59	16	1,176
8	21	0.6	1.60	0.65	4	1.57	59	16	1,235
9	25	0.6	1.60	0.65	4	1.57	59	16	1,470
10	22	0.6	1.60	0.65	4	1.57	59	16	1,293
11	29	0.6	1.60	0.65	4	1.57	59	16	1,705
12	24	0.6	1.60	0.65	4	1.57	59	16	1,411
13	27	0.6	1.60	0.65	4	1.57	59	16	1,587
14	23	0.6	1.60	0.65	4	1.57	59	16	1,352
15	20	0.6	1.60	0.65	4	1.57	59	16	1,176
16	17	0.6	1.60	0.65	4	1.57	59	16	999
17	18	0.6	1.60	0.65	4	1.57	59	16	1,058
18	27	0.6	1.60	0.65	4	1.57	59	16	1,587
19	19	0.6	1.60	0.65	4	1.57	59	16	1,117
20	16	0.6	1.60	0.65	4	1.57	59	16	941
21	21	0.6	1.60	0.65	4	1.57	59	16	1,235
22	24	0.6	1.60	0.65	4	1.57	59	16	1,411
23	19	0.6	1.60	0.65	4	1.57	59	16	1,117
24	12	0.6	1.60	0.65	4	1.57	59	16	706
25	19	0.6	1.60	0.65	4	1.57	59	16	1,117
26	18	0.6	1.60	0.65	4	1.57	59	16	1,058
Run Time Totals:		Water Use Totals:				Water Cost Totals:			
1,529	Min. / Wk.	33,042 Gal. / Wk.		0.10 Acre / Wk.		\$630.00 Cost / Acre.			
25.48	Hrs. / Wk.	143,070 Gal. / Mo.		0.44 Acre / Mo.		\$276.63 Cost / Mo.			
5	Days / Wk.	429,541 Gal. / Yr.		1.32 Acre / Yr.		\$830.53 Cost / Yr.			
5.10	Hrs. / Day	6,608 Gal. / Day		0.02 Acre / Day		\$2,085.73 Cost / Yr.			










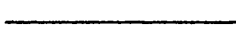



SUMMER (Jun., Jul., and Aug.)									
Project Name:		OrangeCrest Tract 30717				Water meter Number:		1	
Designer Name:		DB				Reclaimed / Potable:		P	
Date Prepared:		04-Sep-03							
Evapotranspiration Rates:		Plant Factors (% of ETo):				Irrigation Efficiency (%):			
Historical:	55.45 In. / Yr.	Turf:		0.8		Stream Rotors:		0.75	
Seasonal:	22.08 In.	Low Water Use Shrubs:		0.3		Spray Heads:		0.65	
Seasonal:	1.70 In. / Wk.	Medium Water Use Shrubs:		0.4		Bubbler Heads:		0.85	
		High Water Use Shrubs:		0.5		Drip Systems:		0.90	
Controller Letter:		B							
VALVE NUMBER	FLOW IN GPM	PLANT FACTOR	PRECIP. RATE	IRRIG. EFFIC.	MAX. MIN./CYCLE	IR/WK INCHES	IR/WK MINUTES	CYCLES PER WK	GALLONS PER WK
1	19	0.6	1.60	0.65	4	1.57	59	16	1,117
2	21	0.6	1.60	0.65	4	1.57	59	16	1,235
3	14	0.6	1.60	0.65	4	1.57	59	16	823
4	16	0.6	1.60	0.65	4	1.57	59	16	941
5	18	0.6	1.60	0.65	4	1.57	59	16	1,058
6	13	0.6	1.60	0.65	4	1.57	59	16	764
7	15	0.6	1.60	0.65	4	1.57	59	16	882
8	25	0.6	1.60	0.65	4	1.57	59	16	1,470
9	23	0.6	1.60	0.65	4	1.57	59	16	1,352
10	24	0.6	1.60	0.65	4	1.57	59	16	1,411
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14	17	0.6	1.60	0.65	4	1.57	59	16	999
15	17	0.6	1.60	0.65	4	1.57	59	16	999
16	20	0.6	1.60	0.65	4	1.57	59	16	1,176
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19	17	0.6	1.60	0.65	4	1.57	59	16	999
20	29	0.6	1.60	0.65	4	1.57	59	16	1,705
21	26	0.6	1.60	0.65	4	1.57	59	16	1,529
22	23	0.6	1.60	0.65	4	1.57	59	16	1,352
23	24	0.6	1.60	0.65	4	1.57	59	16	1,411
24	12	0.6	1.60	0.65	4	1.57	59	16	706
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26	23	0.6	1.60	0.65	4	1.57	59	16	1,352
27	28	0.6	1.60	0.65	4	1.57	59	16	1,646
Run Time Totals:		Water Use Totals:						Water Cost Totals:	
1,587	Min. / Wk.	31,866 Gal. / Wk.		0.10 Acre / Wk.		\$630.00 Cost / Acre.			
26.46	Hrs. / Wk.	137,979 Gal. / Mo.		0.42 Acre / Mo.		\$266.79 Cost / Mo.			
5	Days / Wk.	414,255 Gal. / Yr.		1.27 Acre / Yr.		\$800.97 Cost / Yr.			
5.29	Hrs. / Day	6,373 Gal. / Day		0.02 Acre / Day		\$2,011.50 Cost / Yr.			

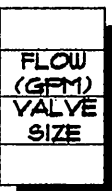


SCH 40 PVC SLEEVING CHART		
1 1/4" SLEEVE	1-4 WIRES	1/2" PIPE
1 1/2" SLEEVE	5-10 WIRES	3/4" PIPE
2" SLEEVE	11-20 WIRES	1" PIPE
2 1/2" SLEEVE	21-30 WIRES	1 1/4" PIPE
3" SLEEVE	31-40 WIRES	1 1/2" PIPE
4" SLEEVE	41-60 WIRES	2" PIPE
6" SLEEVE	61-99 WIRES	2 1/2" PIPE
8" SLEEVE	100+ WIRES	4" PIPE
10" SLEEVE	N/A	6" PIPE

IRRIGATION LEGEND												
SYMBOL	MANUFACTURER	MODEL *	NOZZLE	RAD.	PSI	FLOW (GPM)					DETAIL	NOTES
						Q		H	F	Van		
SHRUB HI-POP SPRAY HEADS												
○ ● ● ●	RAINBIRD	1812-SAM-FRS-5	Q/H/F/VAN	5'	25	10	20	41	37/60/120	'E, H' L-5	(1)	
△ ▲ ▲ ▲	RAINBIRD	1812-SAM-FRS-8	Q/H/F/VAN	8'	25	26	52	105	72/119/17	'E, H' L-5	(1)	
◇ ▽ ■ ◆	RAINBIRD	1812-SAM-FRS-10	Q/H/F/VAN	10'	25	39	79	158	75/145/26	'E, H' L-5	(1)	
□ ▤ ▥ ▦	RAINBIRD	1812-SAM-FRS-12	Q/H/F/VAN	12'	25	65	13	26	65/130/26	'E, H' L-5	(1)	
● ● ● ●	RAINBIRD	1812-SAM-FRS-15	Q/H/F/VAN	15'	25	92	185	37	92/185/37	'E, H' L-5	(1)	

ALL IRRIGATION HEADS TO BE INSTALLED PER RIVERSIDE CITY STANDARD DETAIL 44040

EQUIPMENT LEGEND				
SYMBOL	MANUFACTURER/MODEL *	SIZE	DETAIL	NOTES
	IRRIGATION WATER METER - BY UMUD	1½"	PER UMUD	-
	FloBoy Fixed Speed Booster Pumping System, Model(SFBF-93F2A-21R20/40)	3 HP	'B'/L-3	(2)
	NIBCO T585 BALL VALVE	LINE SIZE	'D'/L-5	(2, 3)
	IRITROL MC+ CONTROLLERS - CONTROLLERS MUST BE INSTALLED IN STAINLESS STEEL ENCLOSURE PROVIDED BY UNITED GREEN TECH (800) 421-0719. MODEL-CA2-IRI-36+36. PROVIDE METERED ELECTRICAL SERVICE COORDINATED WITH CONTROLLER LOCATION, AND APPROVED BY PUBLIC UTILITIES ELECTRIC.	(2)36 STA.	'A, B'/L-5	(2, 4)
	GRISWOLD 2250 MASTER ELECTRIC CONTROL VALVE	1½"	'G'/L-5	(2, 3)
	RAINBIRD FRSB-FRS-D SERIES ELECTRIC CONTROL VALVE WITH PRESSURE REGULATING MODULE	PER PLAN	'G'/L-5	(2, 3)
	FEBCO 825Y REDUCED PRESSURE BACKFLOW DEVICE	1½"	'A'/L-3	(2, 3)
	RAINBIRD QUICKCOUPLER '44LRC'	1"	'F'/L-5	(2,3)
	2" & LARGER - CLASS 315 PVC MAINLINE - 18" MIN. TO 24" MAX. COVER	PLAN SIZE	'C'/L-5	(2,3)
	1½" & SMALLER - SCH 40 PVC MAINLINE - 18" MIN. TO 24" MAX. COVER	PLAN SIZE	'C'/L-5	(2, 3)
	CL 200 PVC NON-PRESSURE LATERAL LINE - 12" MIN. TO 16" MAX COVER	PLAN SIZE	'C'/L-5	(2, 3)
	SCH 40 PVC IRRIGATION MAIN / WIRE SLEEVES - 24" MIN. COVER	SEE CHART	-	
NOT SHOWN	UF RATED CONTROL WIRE, 12 GA COMMON, 14 GA PILOT - 18" MIN. COVER	12/14 GA	'C'/L-5	
	6" ROUND VALVE BOX WITH (2) EXTRA CONTROL WIRES & (1) COMMON WIRE	12/14 GA	-	



(1) ALL SPRINKLERS SHALL BE 12" POP-UP BODIES
 (2) PIPES AND VALVES ARE SHOWN IN HARDSCAPE FOR CLARITY ONLY.
 (3) ALL MAINLINE TEES AND 90'S ARE TO BE SCH 40 PVC.
 (4) COORDINATE ELEC. POINT OF CONNECTION WITH CITY OF RIVERSIDE PUBLIC UTILITIES-ELECTRIC FOR METERED SERVICE LOCATION.
 NOTE: ALL VALVE BOX COVERS TO BE CARSON/BROOKS GREEN VALVE BOXES OR EQUAL.

BENCHMARK:
CITY OF RIVERSIDE BENCHMARK ?
?
?
?
ELEVATION = ?



3812 MISSION INN AVE
RIVERSIDE, CALIFORNIA
92501
(909) 781-1930
LIC. #1512
FAX (909) 808-0091
CONTACT: CAMILO ARELLANO

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY: [Signature]
DEPUTY P.W. DIRECTOR
PRINCIPAL ENGINEER
CHIEF P.W. INSPECTOR
STREET SERVICES
SURVEYOR
TRAFFIC DIVISION
PARKS DEPARTMENT
DATE: 10/8/03

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B
IRRIGATION PLAN
HORIZ. SCALE: NTS
VERT. SCALE: NTS

ACCT. NO.
PLAN NO.:
R-3071-L
SHEET 2 OF 11
DRAWING L-2

PRESSURE LOSS CALCULATIONS (VALVE A-24 @ 12 GPM)	
LOSS THRU 1½" WATER METER (EL. 100%)	12 PSI
LOSS THRU 1½" B/V DEVICE	12.0 PSI
LOSS THRU 200' OF 2½" MAIN	10 PSI
LOSS THRU GATE VALVES	10 PSI
LOSS THRU 1" VALVE (EL. 105.4)	15 PSI
LOSS THRU LATERAL LINES	28 PSI
ELEVATION LOSS + 3'	3.3 PSI
MISC. LOSS THRU FITTINGS	2.4 PSI
TOTAL SYSTEM LOSSES	142 PSI
PRESSURE REQUIRED AT HEAD	
STATIC PRESSURE	56.3 PSI
PUMP BOOST	30.0 PSI
RESIDUAL PRESSURE	
	32.0 PSI

EVATION = ?



WATER METER INFORMATION

WMUD POTABLE WATER METER
METER ADDRESS:

METER NUMBER:

CONTRACTOR SHALL PROVIDE ABOVE
INFORMATION ON AS-BUILT DRAWINGS.

IRRIGATION INFORMATION

WMUD POTABLE WATER METER
APPROX. STATIC PRESSURE AT METER:

MAXIMUM DEMAND: GPM

STATIC PRESSURE BASED ON THE INFO

ELECTRICAL METER INFORMATION	
METER ADDRESS:	
METER SIZE (AMPS/VOLTS):	
CONTRACTOR SHALL PROVIDE ABOVE INFORMATION ON AS-BUILT DRAWINGS.	

MAKE POINT OF CONNECTION (ELEVATION 1706') IMMEDIATELY DOWNSTREAM OF 1-1/2" IRRIGATION WATER METER AND REDUCED PRESSURE BACKFLOW DEVICE INSTALLED BY LANDSCAPE CONTRACTOR. INSTALL THE FOLLOWING:

- 1) 1-1/2" REDUCED PRESSURE BACKFLOW DEVICE, FEBCO 825Y.
- 2) INSTALL IRRIGATION BOOSTER PUMP, FLOBOY FIXED SPEED BOOSTER PUMPING SYSTEM, MODEL (SFBE-S32A-21R0NO/40).
- 3) SPLIT MAIN LINE AFTER BOOSTER PUMP. SYSTEM 'A' AND 'B' SHALL OPERATE INDIVIDUAL MASTER VALVES.
- 4) 1-1/2" IRRIGATION MASTER VALVE, GRISWOLD 2250(E). CONNECT TO MASTER VALVE OUTPUT AT CONTROLLER. REFER TO IRRIGATION DETAILS FOR ADDITIONAL INFORMATION.
- 5) EXTEND MAIN LINE TO VALVES AS SHOWN PER PLAN.

LOCATE ELECTRIC METER ENCLOSURE AT BACK OF CURB. INSTALL PER CITY OF RIVERSIDE DETAILS AND SPECIFICATIONS.

IRRIGATION / ELECTRIC METER SIZE: 100 AMP-¹²⁰/₂₄₀ V60-3 WIRE

IRRIGATION / ELECTRIC METER ADDRESS: 20666 GROVE COMMUNITY DRIVE, RIVERSIDE, CA 92508

AUTOMATIC IRRIGATION CONTROLLERS. (IRRITROL MC+) TO BE INSTALLED INSIDE STAINLESS STEEL ENCLOSURE. SEE DETAIL 'B' SHEET L-5.

COORDINATE WITH THE CITY OF RIVERSIDE PUBLIC UTILITIES FOR METERED ELECTRICAL SERVICE

	DESCRIPTION	QTY
1	STATION BASE, SMALL	1
2	ENCLOSURE, SMALL	1
3	PAN, EXPAND	1
4	DISCONNECT, FUSIBLE	1
5	SURINE ARRESTOR	1
6	PANEL, CRAFT CONTROL	1
7	TRANSDUCE, PRESSURE	1
8	THERMOSTAT, FAN	1
9	TRANSFORMER	1
10	INLET, 3" FLANGED	1
11	TUBE, 3/4" FILL	1
12	PUMP	1
13	SENSOR, THERMAL	1
14	MOTOR	1
15	VALVE, 3" PRESSURE CONTROL	1
16	MANIFOLD, 3" DISCHARGE	1
17	SWITCH, FLOW	1
18	WHEEL, DISCHARGE PRESSURE	1
19	WALVE, 1/2" ISO	1
20	DISCHARGE, 3" FLANGED	1

BASIC MODEL NUMBER:
SFBF-S5XXA-XXXXX

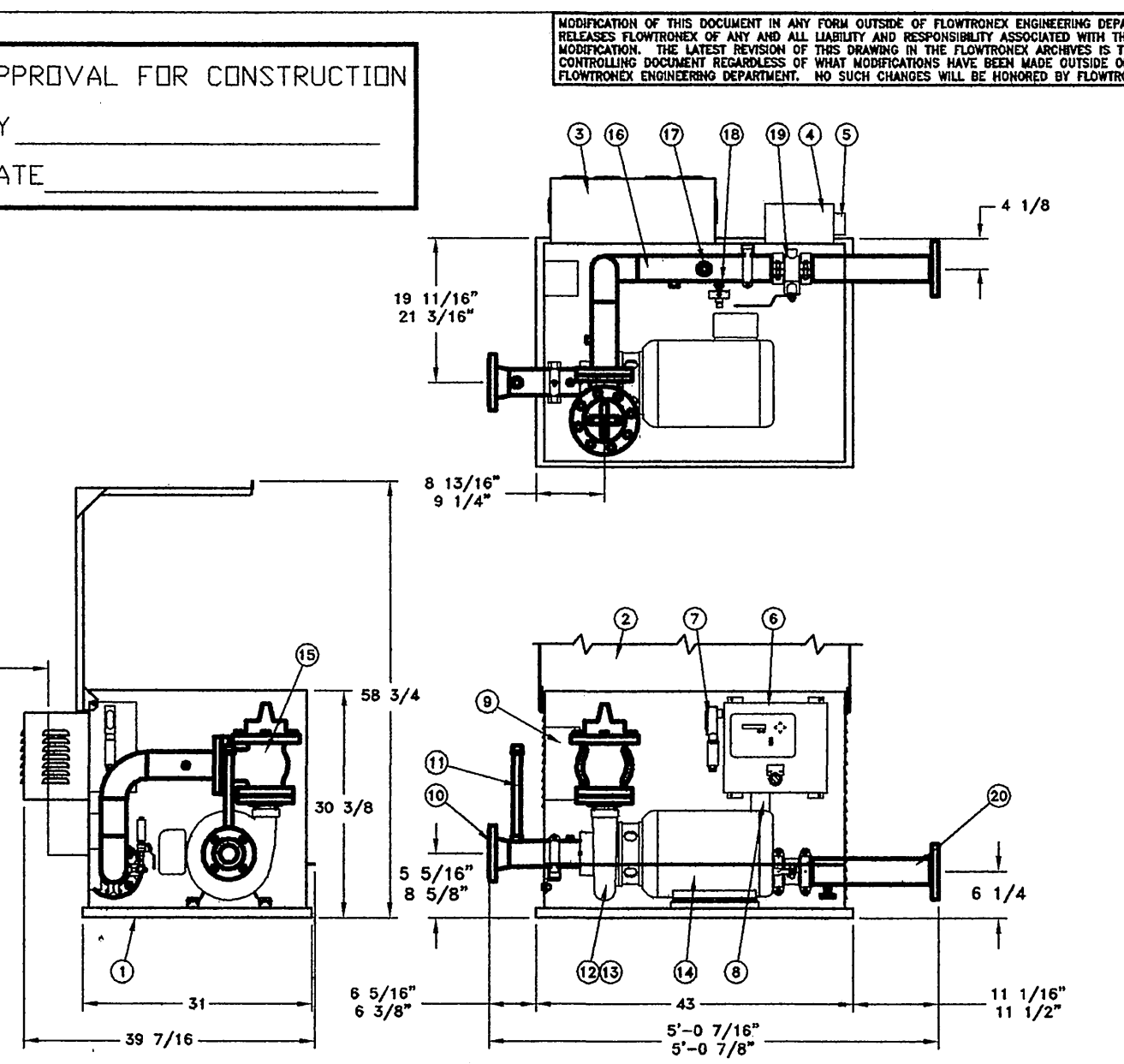
("X" IN MODEL NUMBER REPRESENTS DETAIL
SPECIFIC TO ORDER)

3-25 HP AVAILABLE IN ALL VOLTAGES EXCEPT
110 VAC (110VAC AVAILABLE ON A LIMITED
BASIS).


SINGLE PHASE AVAILABLE IN 3-10 HP.

WEIGHT: 3'-6" —
660-810 LBS. NOTE 1

APPROVAL FOR CONSTRUCTION
BY _____
DATE _____



Flowtronex

 **ITT Industries**
Engineered for life

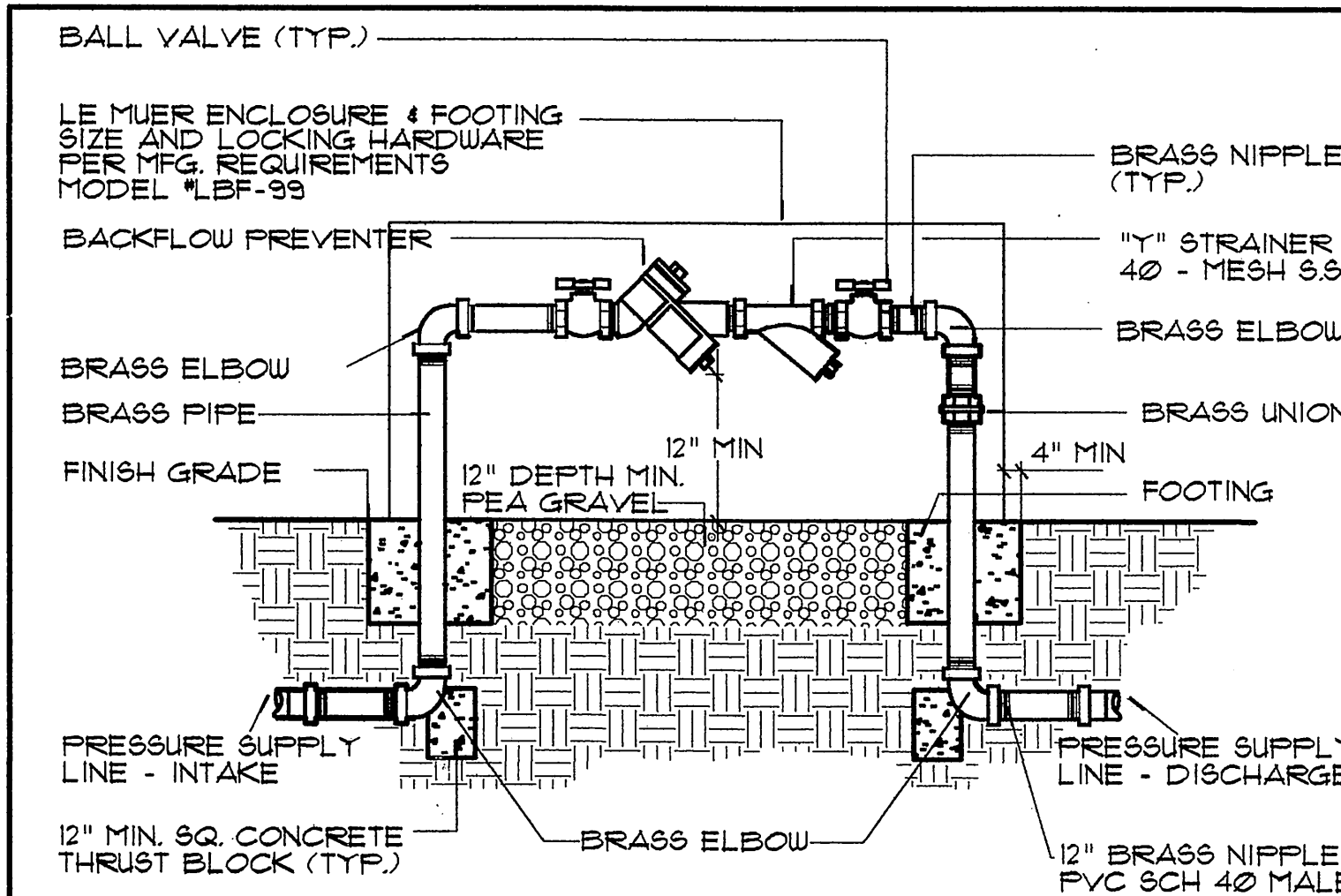
10661 NEWKIRK STREET, DALLAS, TEXAS 75220, USA 1-800-785-7481

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

				PUBLIC WORKS			
				APPROVED BY	BY	DATE	
				DEPUTY P.W. DIRECTOR			
				PRINCIPAL ENGINEER			
				CHIEF P.W. INSPECTOR			
				STREET SERVICES			
				SURVIVOR			
				TRAFFIC DIVISION			
				PARKS DEPARTMENT			
MARK	REVISIONS			APPR.	DATE		
DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____							

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B
IRRIGATION PLAN

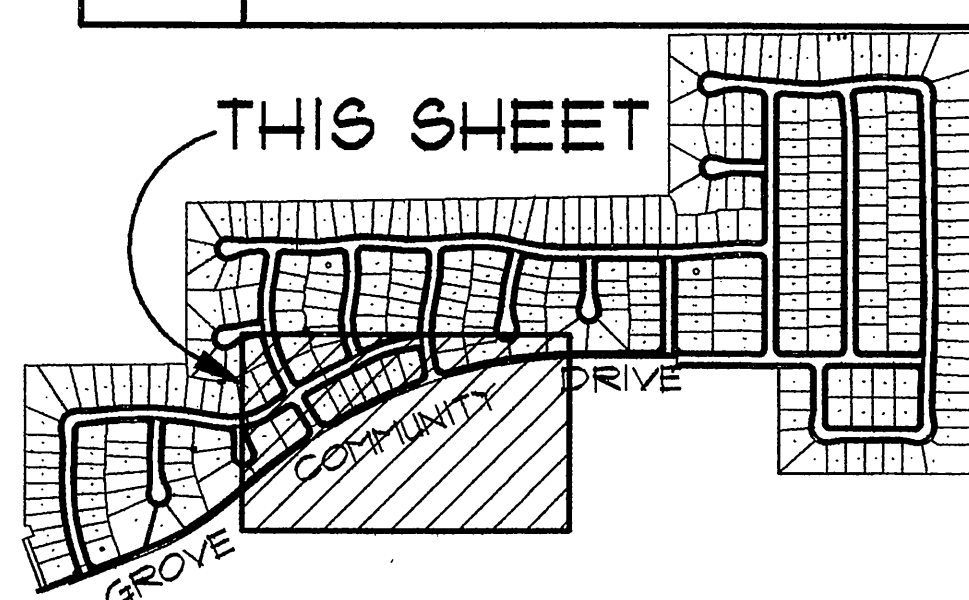
ACCT. NO.	
PLAN NO:	
R-3071-L	
SHEET 3 OF 11	
DRAWING: L-3	



NOTE:

1. EQUIPMENT TO BE INSTALLED AT A MINIMUM OF 12" FROM WALLS
INSTALL IN PLANTING AREA.
2. ALL ABOVE GROUND ASSEMBLY SHALL RECEIVE ONE (1) COAT RED LEAD
PRIMER AND ONE (1) COAT PAINT
3. WHEN UNIT IS NEXT TO WALL, TEST COCKS TO BE ON OUTSIDE.
4. PAINT DARK GREEN (PER L.A. AT TIME OF INSTALLATION.)
5. VERTICAL BRASS RISERS AND UNION MAY BE CHANGED TO GALV. / SCH 40
PIPE WITH WRITTEN PERMISSION OF WATER PERYEYOR

A BACKFLOW DEVICE

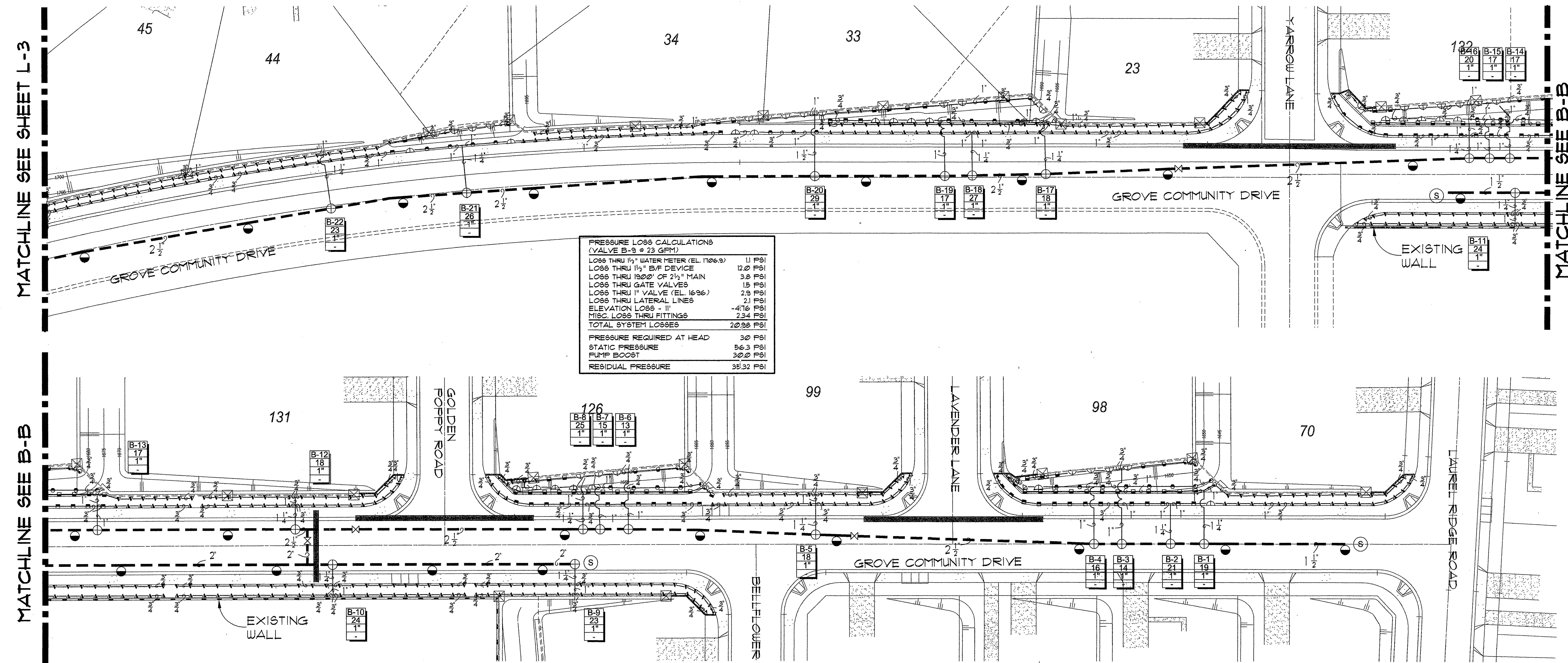


MATCHLINE SEE SHEET L-4

MATCHLINE SEE SHEET L-3

MATCHLINE SEE B-B

MATCHLINE SEE B-B



PRESSURE LOSS CALCULATIONS (VALVE B-9 @ 23 GPM)	
LOSS THRU 1 1/2" WATER METER (EL. 1106.3)	1.1 PSI
LOSS THRU 1 1/2" B/F DEVICE	12.0 PSI
LOSS THRU 1900' OF 2 1/2" MAIN	3.8 PSI
LOSS THRU GATE VALVES	1.5 PSI
LOSS THRU 1" VALVE (EL. 1636)	2.3 PSI
LOSS THRU LATERAL LINES	2.1 PSI
ELEVATION LOSS - 1'	-4.16 PSI
MISC. LOSS THRU FITTINGS	2.34 PSI
TOTAL SYSTEM LOSSES	20.98 PSI
PRESSURE REQUIRED AT HEAD	30 PSI
STATIC PRESSURE	56.3 PSI
PUMP BOOST	30.0 PSI
RESIDUAL PRESSURE	35.32 PSI

1. GENERAL - ALL WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CITY CODES AND STANDARDS, AND THESE PLANS.
- A. THE CONTRACTOR SHALL CAREFULLY REVIEW THE SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK UNDER THIS CONTRACT.
- B. THE CONTRACTOR SHALL CARRY ALL WORKERS' PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY OWNER.
- C. A PUBLIC LANDSCAPE PERMIT AS ISSUED BY THE CITY PARK AND RECREATION DEPARTMENT IS REQUIRED. THE CONTRACTOR SHALL APPLY FOR ALL PERMITS AND PAY FOR SAME.
2. SCOPE OF WORK - UNLESS OTHERWISE SPECIFIED, THE CONSTRUCTION OF IRRIGATION SYSTEMS SHALL INCLUDE THE FURNISHING, INSTALLING, TESTING OF ALL MAIN LINE, POINT OF CONNECTION, LATERAL LINE, RISERS AND FITTINGS, AND THE FURNISHING AND INSTALLING OF SPRINKLER HEADS, AUTOMATIC CONTROLLER, CONTROL WIRES (TO VALVES), ELECTRICAL CONTROL VALVES, BACKFLOW PROTECTION, EXCAVATION AND BACK FILL AND ALL OTHER WORK IN ACCORDANCE WITH THESE PLANS, DETAILS AND NOTES.

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, PROPERTY, TRANSPORTATION AND PERFORM ALL OPERATIONS REQUIRED FOR A COMPLETE AND OPERABLE IRRIGATION SYSTEM AS INDICATED ON, OR REASONABLY IMPLIED BY THE DRAWINGS AND/OR NOTES, INCLUDING AS A PART OF THE IRRIGATION WORK, BUT NOT LIMITED BY IT, ARE THE FOLLOWING ITEMS:

- A. INSTALL COMPLETE OPERABLE INDEPENDENT, AUTOMATIC, IRRIGATION SYSTEMS PER THE PLANS, DETAILS, LEGEND AND NOTES.
- B. ALL IRRIGATION WORK SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIALS AND WORKMANSHIP INCLUDING SETTLING OF BACK FILLED TRENCHES BELOW GRADE FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK.
3. THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO INTERPRETATION OF THE DRAWINGS AND THE ACCEPTABLE FULFILLMENT OF THE CONTRACT.

4. PIPING SHOWN ON THE PLANS IS ESSENTIALLY DIAGNAMATIC. CONTRACTOR SHALL ROUTE PIPING TO AVOID CONFLICT WITH STATIONARY ELEMENTS AND IN SUCH A MANNER AS TO CONFORM WITH THE VARIOUS DETAILS.
5. THE CONTRACTOR SHALL, AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE OWNER.
6. EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION AND CONDITION OF ALL UTILITIES AND BE RESPONSIBLE FOR ANY DAMAGE. UTILITIES PLANS MAY BE OBTAINED FROM OWNER.
7. THE CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS AND RUBBISH INCIDENTAL TO HIS WORK.
8. IRRIGATION DESIGN IS BASED ON 55 PSI AVAILABLE WATER PRESSURE AT 30 GPM. CONTRACTOR SHALL VERIFY PRESSURE PRIOR TO CONSTRUCTION SHOULD A DISCREPANCY EXIST, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.
9. CONTRACTOR SHALL MAKE POINT OF CONNECTION (P.O.C.) PER PLAN.
10. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING METERED ELECTRICAL SERVICE FOR THE IRRIGATION CONTROLLER AND CONNECTING 120 VOLT SERVICE TO THE CONTROLLER. ALL COMPONENTS SHALL BE INSTALLED PER CITY STANDARDS.
11. ALL CONTROL WIRE SHALL BE SOLID COPPER PLASTIC INSULATED, UF DIRECT BURIAL WIRE. ALL COMMON WIRE SHALL BE AUG #2 WHITE. ALL PILOT WIRE SHALL BE AUG #14, RED OR BLACK.
12. ALL CONTROL WIRE AND IRRIGATION LINE RUNS UNDER PAVING SHALL BE ENCASED IN SCH. 40 PVC PIPE SLEEVES.
13. FINAL LOCATION OF CONTROL VALVES SHALL BE SUBJECT TO THE FIELD REVIEW AND APPROVAL OF BOTH THE PARKS PROJECTS INSPECTOR AND THE LANDSCAPE ARCHITECT.
14. ALL BRASS OR GALVANIZED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE OR LEO-LUBE JOINT COMPOUND (OR EQUAL). ALL PVC THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

15. ALL PVC SOLVENT-WELDED CONNECTIONS SHALL BE MADE WITH SOLVENT-WELDED MATERIALS AS RECOMMENDED BY THE PIPE MANUFACTURER. SOLVENT-WELDED PRIMER SHALL BE APPLIED AT ALL CONNECTIONS.
16. UPON COMPLETION OF THE PROJECT, CONTRACTOR TO TURN OVER TO OWNER:
- A. A REPRODUCIBLE SET OF RECORD DRAWINGS AND CONTROLLER CHART. PROVIDE A DUPLICATE SET FOR CITY RECORDS AND TURN OVER TO THE PARKS PROJECTS INSPECTOR AT FINAL ACCEPTANCE INSPECTION.
- B. 2 KEYS FOR EACH CONTROLLER.
- C. 2 QUICK COUPLER KEYS AND MATCHING HOSE GUILVES.
- D. 2 OF EACH SPRINKLER HEAD SPECIFIED.
17. RECORD DRAWINGS - THE CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE A COMPLETE RECORD SET OF PRINTS WHICH SHALL BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS. PRIOR TO FINAL REVIEW THE CONTRACTOR SHALL TRANSCRIBE ALL INFORMATION FROM THE RECORD SET TO A REPRODUCIBLE PHOTO MYLAR, OBTAINED FROM THE LANDSCAPE ARCHITECT. ALL WORK SHALL BE NEAT AND LEGIBLE, LOCATING THE FOLLOWING ITEMS FROM PERMANENT POINTS OF REFERENCE: BALL VALVES, MAIN LINE AND CONTROL WIRE ROUTING, P.O.C. CONTROL VALVES AND CONTROLLER, QUICK COUPLING VALVES, AND OTHER PERTINENT UNDERGROUND ITEMS.
18. CONTROLLER CHART - UPON REVIEW OF THE FINAL RECORD DRAWINGS, PROVIDE ONE CHART PER EACH CONTROLLER INSTALLED.
- A. THE CHART IS TO BE A REDUCED COPY OF THE REVIEWED RECORD SYSTEM (A BLACK LINE PRINT REDUCED TO THE MAXIMUM SIZE THE CONTROLLER DOOR WILL ALLOW, COLORED WITH A DIFFERENT COLOR FOR EACH VALVE STATION).
- B. WHEN COMPLETED, REVIEWED AND ACCEPTED BY THE PARKS PROJECTS INSPECTOR, THE CHART SHALL BE HERMETICALLY SEALED BETWEEN TWO (2) PIECES OF 22 MIL CLEAR PLASTIC AND MOUNTED ON THE INSIDE OF THE CONTROLLER DOOR USING VELCRO TAPE OR EQUAL.
19. CONTRACTOR SHALL ALSO REFER TO CITY OF RIVERSIDE STANDARD IRRIGATION SPECIFICATIONS SECTION 02-441.

FloBoy Fixed Speed Booster Pumping System, Model(SFBF-S3F2A-21RON/40) rated for 60 GPM at 30 PSI Boost. Minimum suction pressure to be 50 PSI. Motor is 3 HP, 3600 RPM Full voltage, horizontal NEMA faced ODP. Pumps shall have cast iron casing, enclosed impeller and mechanical seal. Electrical power shall be 230 volts, 1 phase, 60 Hertz.

Standard Construction will include:

- UL Listing of complete FloBoy pumping system.
- Maine grade aluminum enclosure with plated piping.
- Lockable access cover.
- Flowtronix engineered ventilation fan system.
- External 30 amp electrical fusible disconnect in NEMA 3R enclosure.
- 3 in. Flanged suction and discharge connections.
- 3 in. control valve with pressure reducing pilot and backcheck.
- 2 5/8 in. silicone filled pressure gauges with isolation valve.
- 3 in. station discharge isolation valve.

Factory run testing using actual suction pressure, discharge pressure and flow conditions.

U.L. listed NEMA 12 control/starter panel.

Suction pressure gauge.

Programmable microprocessor based industrial grade controller with operator interface device (OASIS).

S.L.A.P. U.L. category B & C surge & lightning arrestor with total power dissipation of 82,500,000 VA, maximum clamping voltage - 1,500 volts (200a Pulse, 8*20 msec).

On/Off/Auto selector switches.

Low/high discharge pressure shutdown and alarm.

High pump temperature thermal sensor/safety.

Solid State overload/single phase/phase imbalance/low voltage protection.

3 HP across the line starter.

24 volt AC relay for starting and stopping.

1 CD - FloBoy operation & maintenance manual

1 Printed copy of the FloBoy operator & maintenance manual

1 year limited warranty.

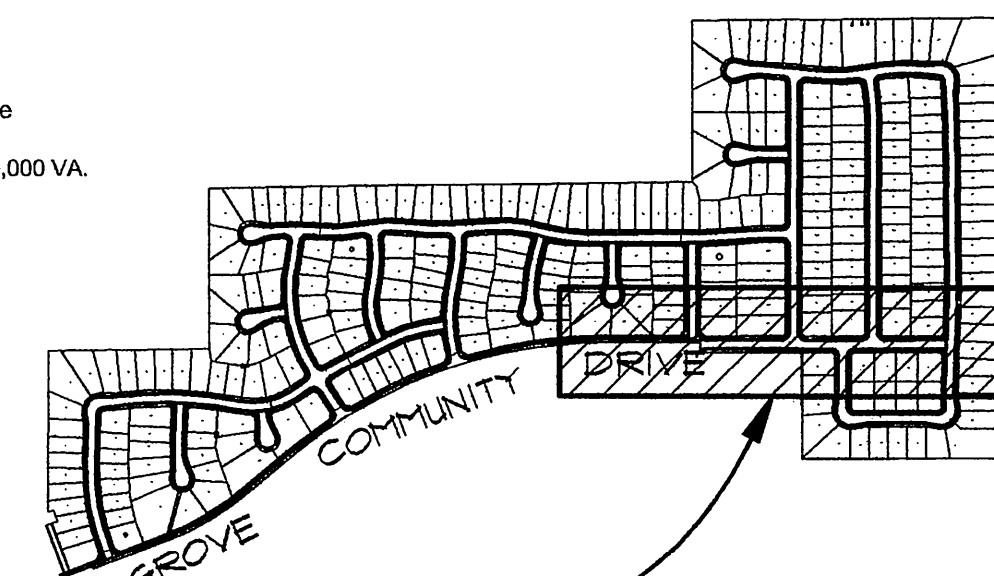
Additional Items:

- Startup Service (SFBZ-F000-000)
- Flowtronix PSI, Inc.
- Dallas, TX USA
- 800-786-7480

Shipment: Estimating 4 weeks after receipt of signed contract and drawing approval.

F.O.B. Dallas, Texas

REFER TO L-2 FOR IRRIGATION LEGEND



THIS SHEET



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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



JOB #03105

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RIVERSIDE, CALIFORNIA
92501
(909) 781-1930
LIC. #1512
FAX (909) 699-0091
CONTACT: CAMILO ARELLANO

MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DRAWN BY	CHECKED BY	

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
STREET SERVICES		
SURVEYOR		
TRANSIT DIVISION		
PARKS DEPARTMENT		

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B
IRRIGATION PLAN

HORIZ. SCALE: NTS

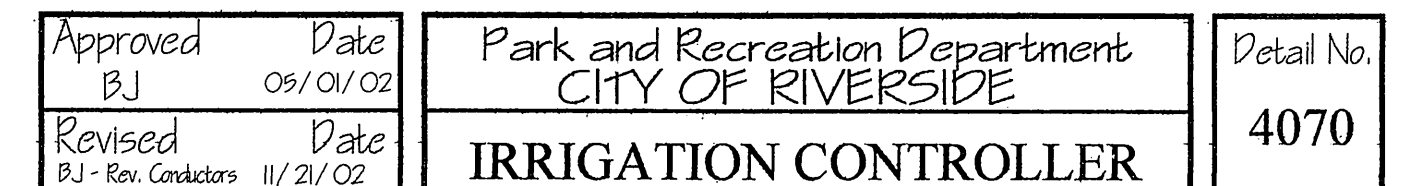
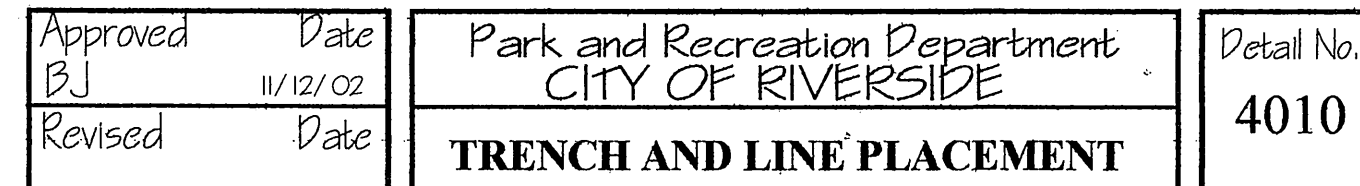
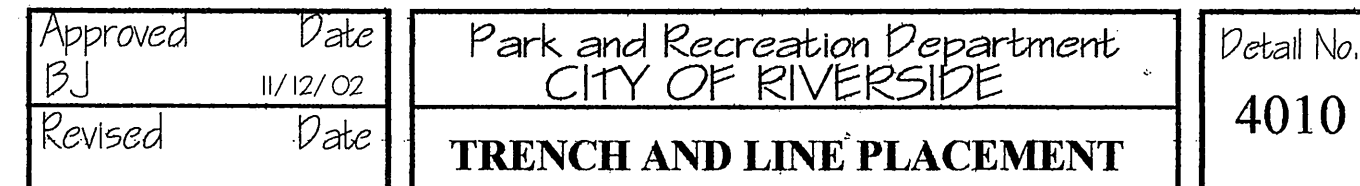
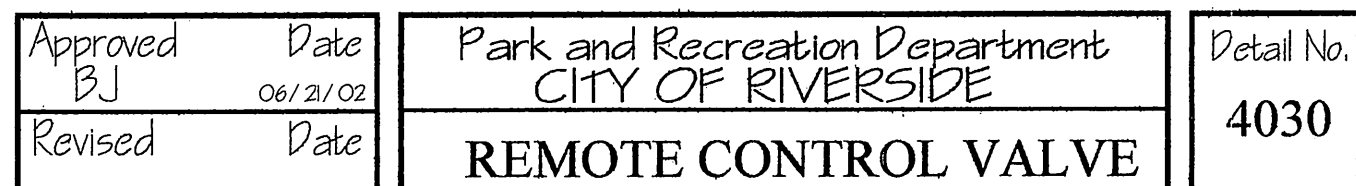
VERT. SCALE: NTS

ACCT. NO.

PLAN NO:

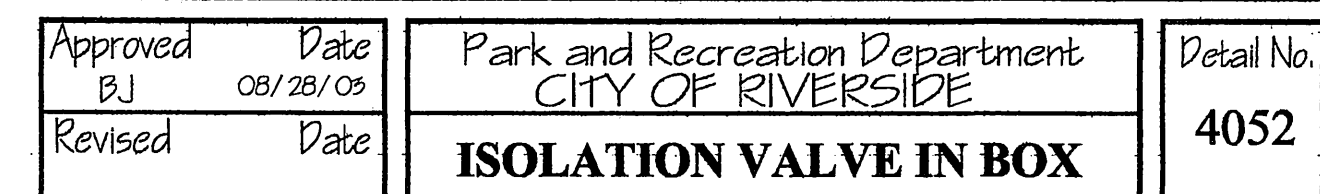
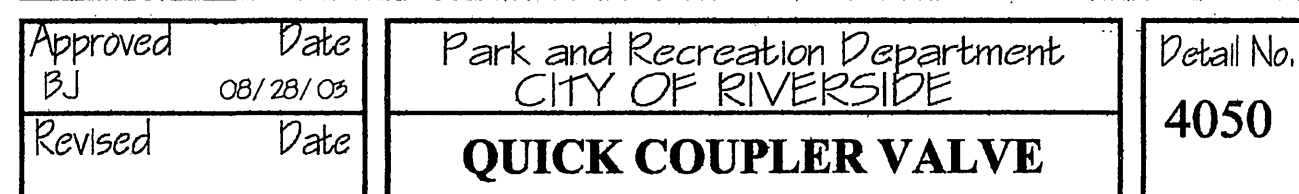
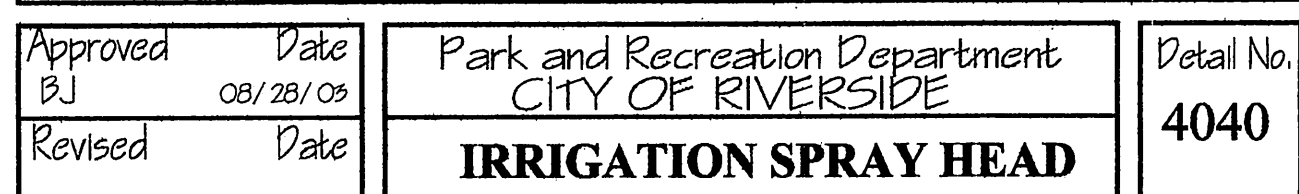
R-3071-L
SHEET 4 OF 11

DRAWING L-4



Approved BJ	Date 05/01/02	Park and Recreation Department CITY OF RIVERSIDE IRRIGATION CONTROLLER	Detail No. 4070
Revised BJ - Rev. Conductors	Date 11/21/02		

E	SHRUB POP UP ON SLOPE	N.T.S.
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Approved BJ	Date 05/01/02	Park and Recreation Department CITY OF RIVERSIDE ELECTRIC SERVICE NON-METERED (CITY MAINTAINED)/METERED (HOA MAINTAINED)	Detail No. 4062
Revised BJ Rev. Conductors	Date 11/21/02		

F	QUICKCOUPLER	N.T.S.
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B	ELECTRIC SERVICE	NTS.
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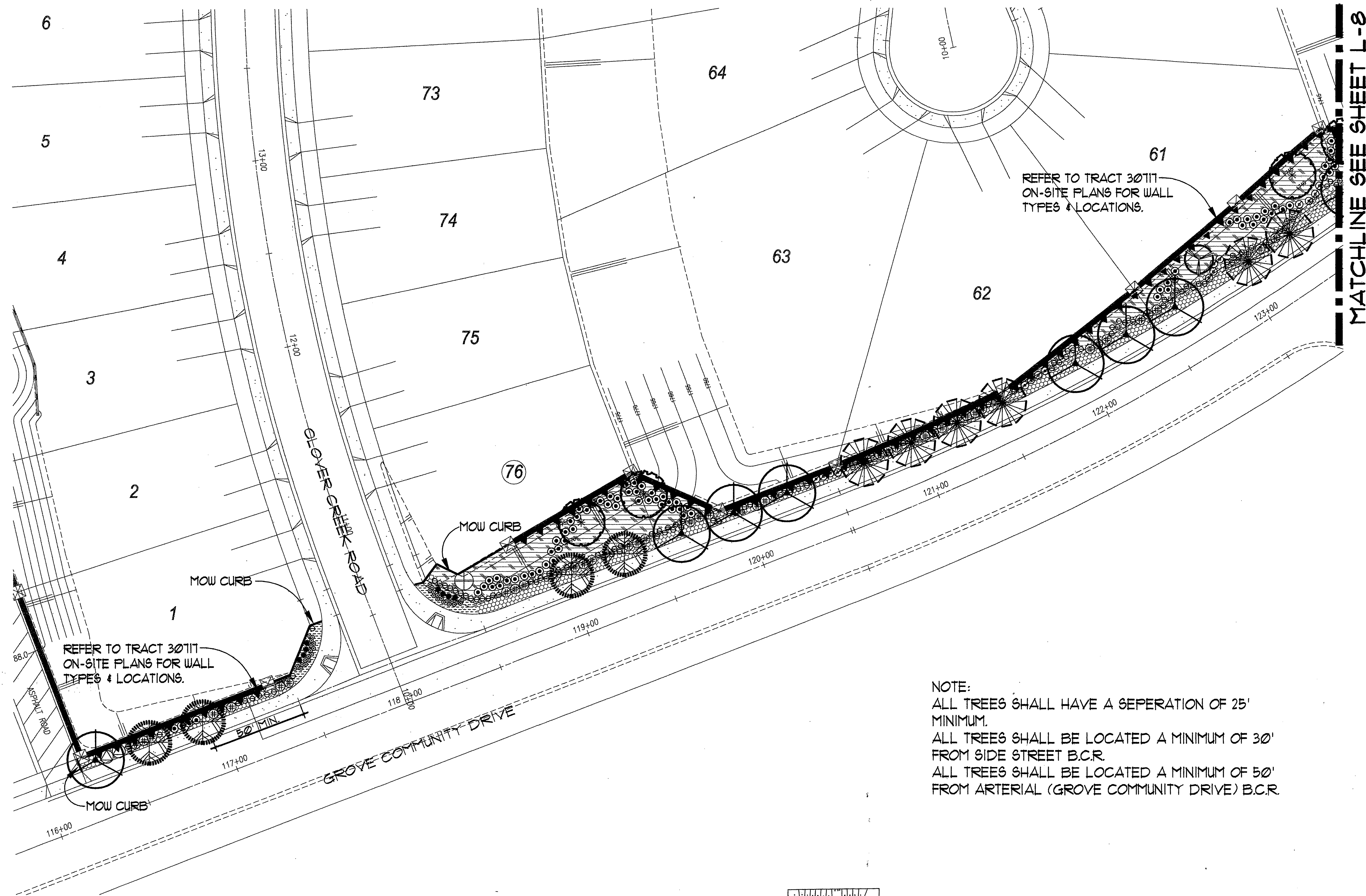
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PLAN NO: _____

R-3071-L

SHEET **5** OF **11**

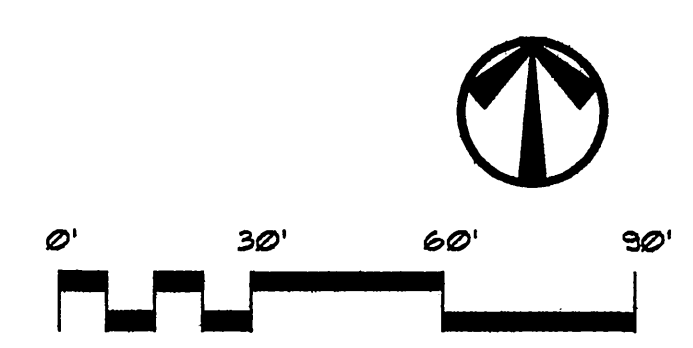
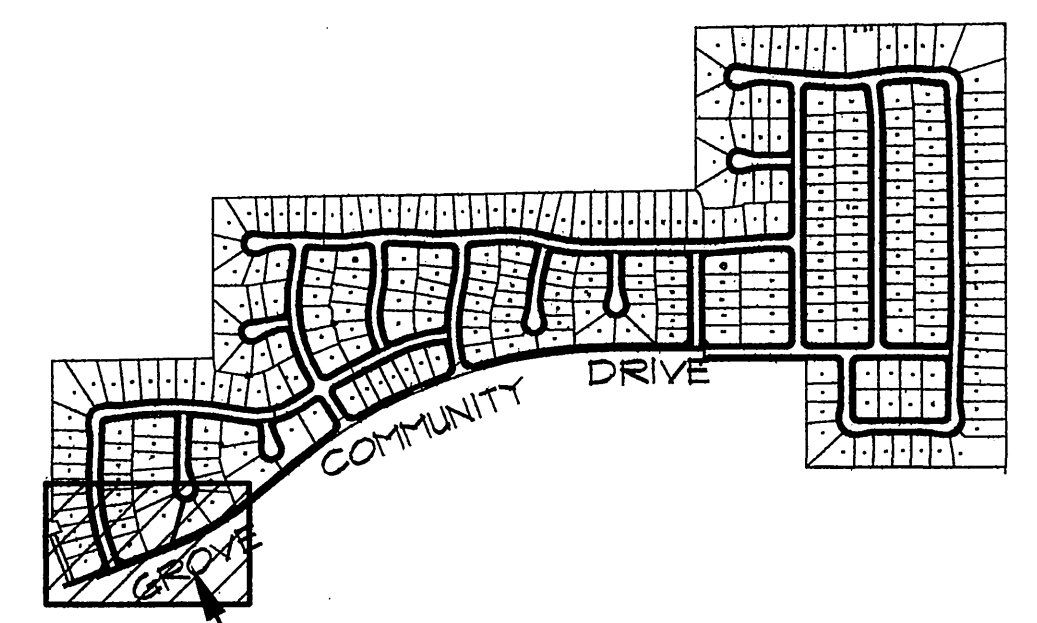
DRAWING: L-5



NOTE:
 ALL TREES SHALL HAVE A SEPERATION OF 25' MINIMUM.
 ALL TREES SHALL BE LOCATED A MINIMUM OF 30' FROM SIDE STREET B.C.R.
 ALL TREES SHALL BE LOCATED A MINIMUM OF 50' FROM ARTERIAL (GROVE COMMUNITY DRIVE) B.C.R.

PLANT LEGEND

SYMBOL	BOTANICAL NAME COMMON NAME	SIZE	SPACING	DETAIL/SHEET
TREES				
	LAGERSTROMIA L. 'CATAUBA' CAPE MYRTLE	15 GAL	PER PLAN	REFER TO DETAIL 'B' SHEET L-9
	ARBUTUS UNEDO STRAWBERRY TREE	15 GAL	PER PLAN	REFER TO DETAIL 'B' SHEET L-9
	BAUHINIA VARIEGATA 'CANDIDA' WHITE ORCHID TREE	15 GAL	PER PLAN	REFER TO DETAIL 'B' SHEET L-9
	FYRUS GALLERYANA 'ARISTOCRAT' ARISTOCRAT PEAR	15 GAL	PER PLAN	REFER TO DETAIL 'B' SHEET L-9
	LOPHOSTEMON CONFERTUS BRISBANE BOX	15 GAL	PER PLAN	REFER TO DETAIL 'B' SHEET L-9
	ALL TREES LOCATED WITHIN 5' FROM ANY HARDSCAPE TO RECEIVE A DEEPROOT BARRIER			DETAIL 'D' SHEET L-9
SHRUBS				
	ACACIA REDOLENS PROSTRATE ACACIA	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	PLUMBAGO AURICULATA CAPE PLUMBAGO	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	PENNISETUM SETACEUM 'RUBRUM' FOUNTAIN GRASS	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	PHORMIUM TENAX 'SEA JADE' NEW ZEALAND FLAX	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	XYLOSMA CONGESTUM SHINY XYLOSMA	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	MAHONIA LOMARIIFOLIA CHINESE HOLLY GRAPE	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	EUONYMUS JAPONICA EVERGREEN EUONYMUS	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	RHAPHIOLEPIS INDICA INDIAN HAWTHORN	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	CALLISTEMON VIMINALIS KEEPING BOTTLEBRUSH	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	CARISSA MACROCARPA 'FANCY' NATAL PLUM	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	CISTUS HYBRIDUS WHITE ROCKROSE	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
	HEMEROCALLIS DAYLILY	1 GAL	PER PLAN	DETAIL 'A' SHEET L-9
GROUND COVER				
	LANTANA MONTEVIDENSIS N.C.N.	1 GAL	4' O.C.	DETAIL 'E' SHEET L-9
	MYOPORUM PARVIFOLIUM 'PUTAH CREEK' N.C.N.	ROOTED CUTTINGS	12" O.C.	DETAIL 'E' SHEET L-9
	ROSMARINUS OFFICINALIS ROSEMARY	ROOTED CUTTINGS	18" O.C.	DETAIL 'E' SHEET L-9
	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	ROOTED CUTTINGS	12" O.C.	DETAIL 'E' SHEET L-9
VINE				
	PARTHENOCISSUS TRICUSPIDATA BOSTON IVY	1 GAL	10' O.C.	DETAIL 'F' SHEET L-9
MULCH				
	ALL PLANTER AREAS (EXCEPT TURF AND SLOPES) TO RECEIVE A 3" THICK LAYER OF 'GORILLA HAIR' MULCH.			
	6" CONCRETE MOW CURB			DETAIL 'C' SHEET L-9



BENCHMARK:
 CITY OF RIVERSIDE BENCHMARK ?
 ELEVATION = ?

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 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

3812 MISSION INN AVE
 RIVERSIDE, CALIFORNIA 92501
 (909) 781-1950
 LJC #1512
 FAX (909) 696-8091
 CONTACT: CAMILO ARELLANO

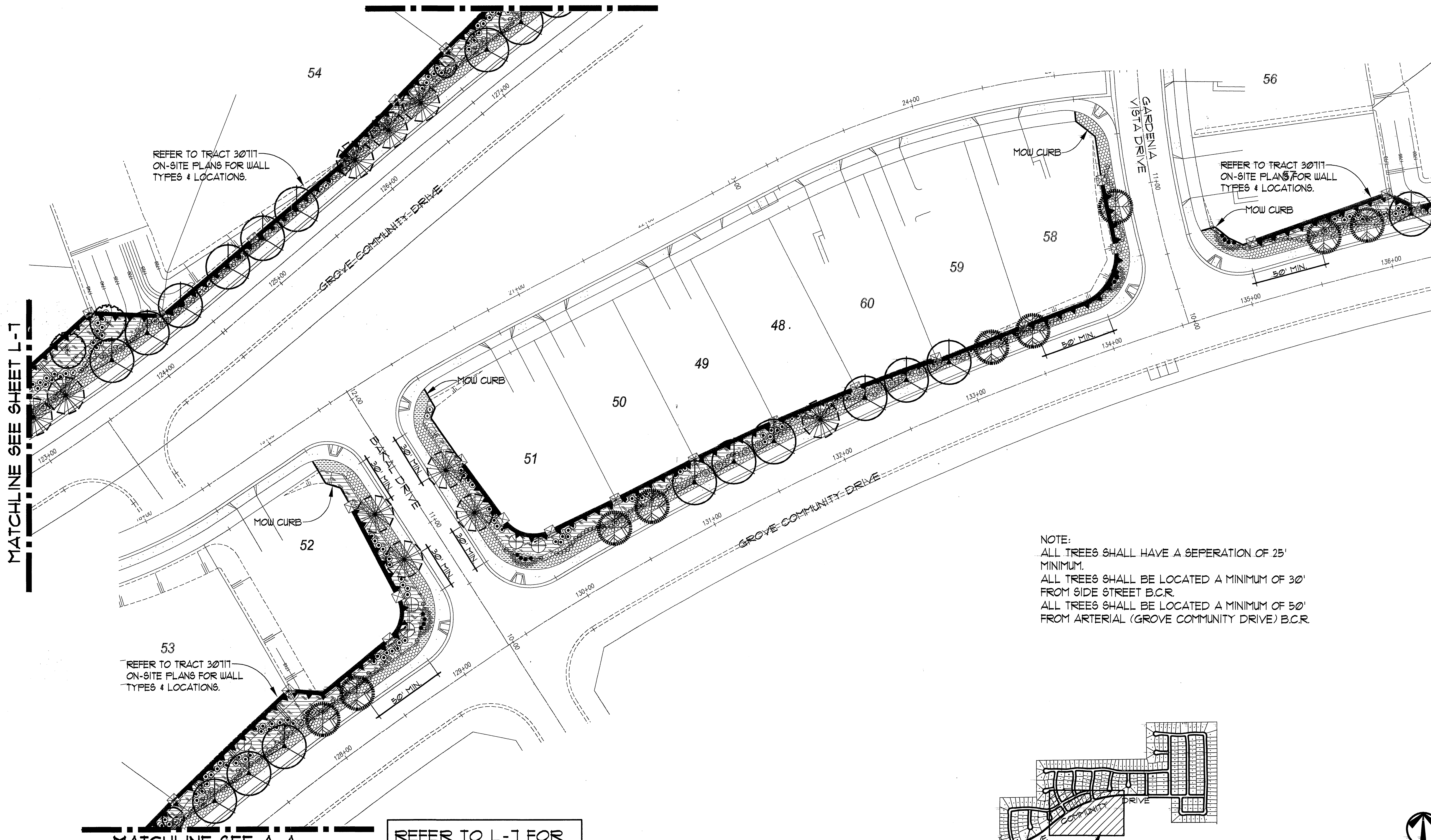
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature]
 DEPUTY P.W. DIRECTOR
 CHIEF P.W. INSPECTOR
 STREET SERVICES
 SURVEYOR
 TRAFFIC DIVISION
 PARKS DEPARTMENT

LANDSCAPE IMPROVEMENT PLANS
 TRACT 30717 LMD
 PLANNING AREA 5A\5B
PLANTING PLAN
 HORIZ. SCALE: NTS VERT. SCALE: NTS

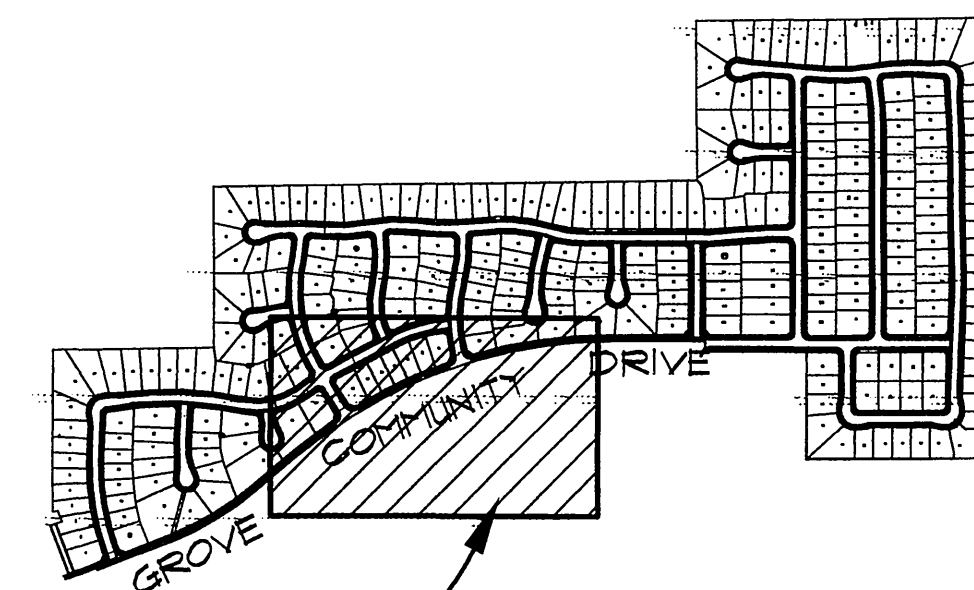
ACCT. NO.
 PLAN NO:
R-3071-L
 SHEET 7 OF 11
DRAWING L-7

MATCHLINE SEE SHEET L-7

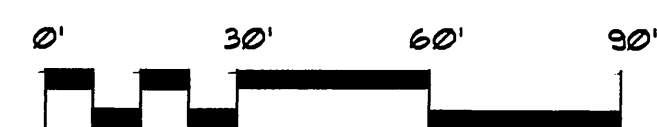
MATCHLINE SEE SHEET L-9



NOTE:
ALL TREES SHALL HAVE A SEPERATION OF 25'
MINIMUM.
ALL TREES SHALL BE LOCATED A MINIMUM OF 30'
FROM SIDE STREET B.C.R.
ALL TREES SHALL BE LOCATED A MINIMUM OF 50'
FROM ARTERIAL (GROVE COMMUNITY DRIVE) B.C.R.



THIS SHEET-




UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



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RIVERSIDE, CALIFORNIA
92501
(909) 781-1930
IJC. #1512
FAX (909) 686-8091

CONTACT: CAMILO ARELLANO

				
MARK	REVISIONS			APPR. DA
DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____				

APPROVED BY	BY	DATE	APPROVED BY
DEPUTY P.W. DIRECTOR			<i>[Signature]</i>
PRINCIPAL ENGINEER	<i>[Signature]</i>	6/16/03	PUBLIC WORKS DIRECTOR
CHIEF P.W. INSPECTOR			
STREET SERVICES			
SURVEYOR			
TRAFFIC DIVISION			DATE 6/18/03
PAVEMENT DIVISION			

HORIZ. SCALE: NTS VERT. SCALE: NTS

ACCT. NO.

PLAN NO:

R-3071-L

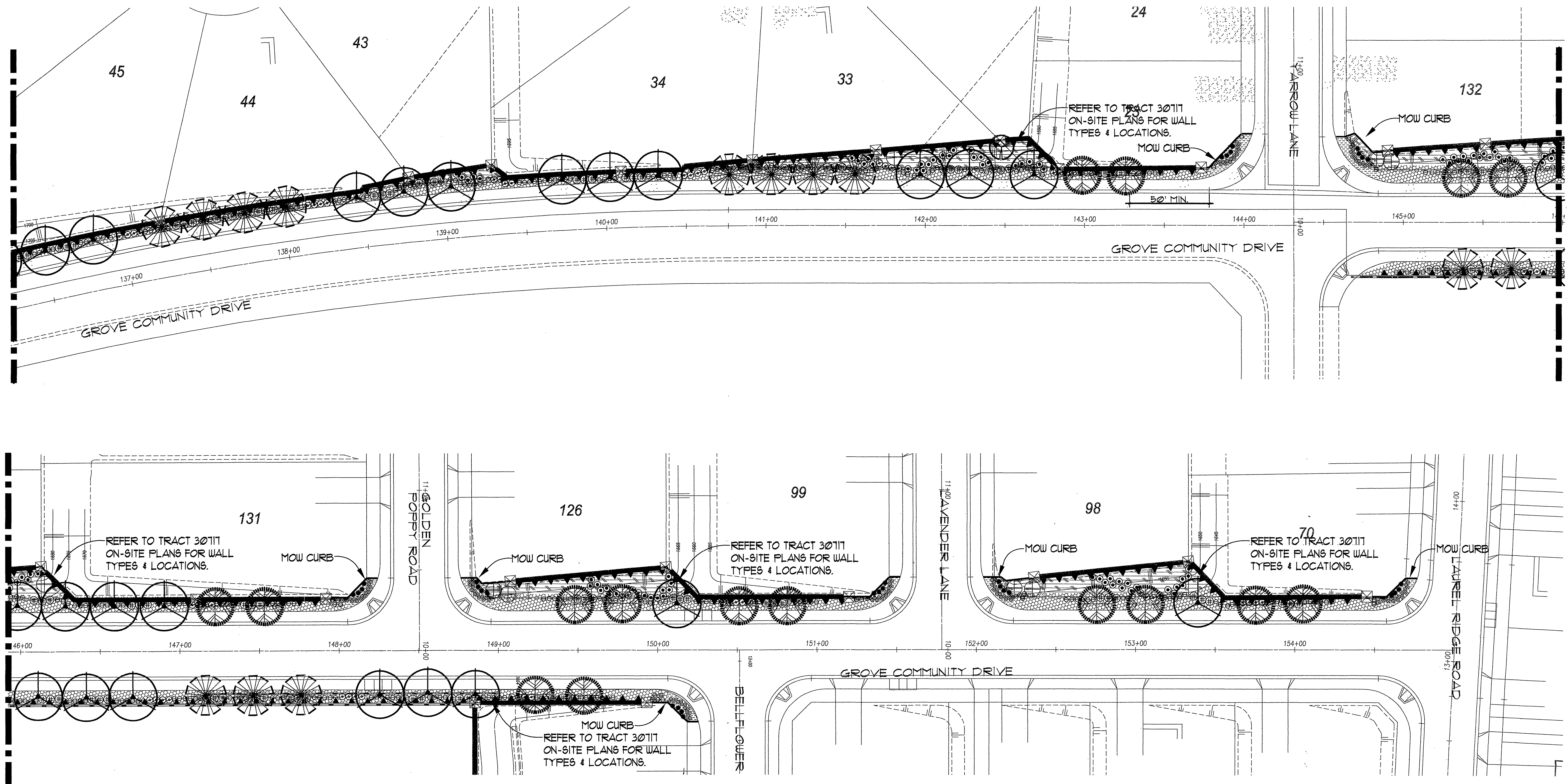
SHEET **8** OF **11**

DRAWING: L-8

MATCHLINE SEE SHEET L-8

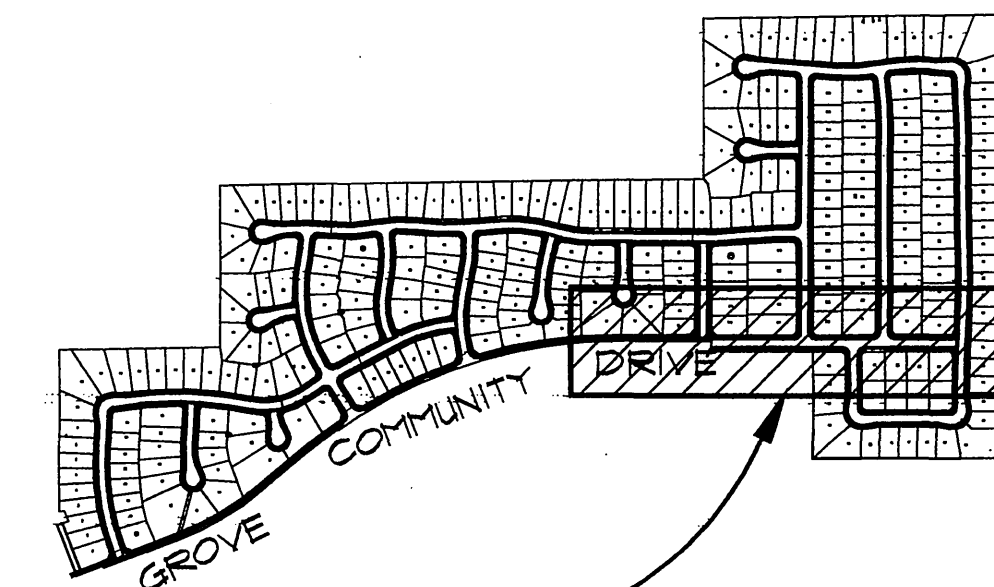
MATCHLINE SEE B-B

MATCHLINE SEE B-B



REFER TO L-7 FOR
PLANTING LEGEND

NOTE:
ALL TREES SHALL HAVE A SEPERATION OF 25'
MINIMUM.
ALL TREES SHALL BE LOCATED A MINIMUM OF 30'
FROM SIDE STREET B.C.R.
ALL TREES SHALL BE LOCATED A MINIMUM OF 50'
FROM ARTERIAL (GROVE COMMUNITY DRIVE) B.C.R.



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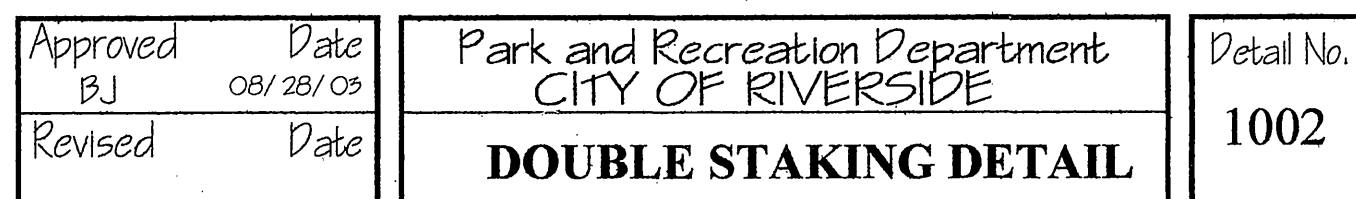
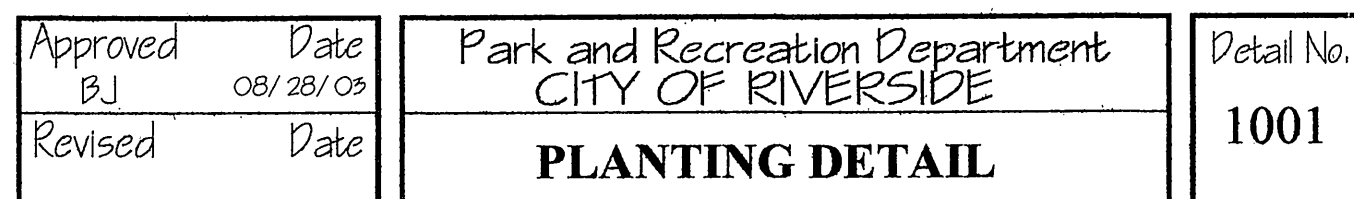
MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DRAWN BY	CHECKED BY	

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT			
APPROVED BY	BY	DATE	APPROVED BY
DEPUTY P.W. DIRECTOR			
PRINCIPAL ENGINEER			
CHIEF P.W. INSPECTOR			
STREET SERVICES			
SURVEYOR			
TRAFFIC DIVISION			
PARKS DEPARTMENT			

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B
PLANTING PLAN
HORIZ. SCALE: NTS VERT. SCALE: NTS

ACCT. NO.
PLAN NO:
R-3071-L
SHEET **9** OF **11**
DRAWING L-9

- 1) Contact the Park Projects Inspector at 351-6254 two working days (**48 hours**) prior to installing any plant material.
- 2) Trees planted in turf areas shall be maintained with a minimum 12" radius around the tree free of turf throughout the maintenance period.
- 3) Watering basins may be removed after the maintenance period.
- 4) For staking information as applicable, refer to Standard Detail 1002.
- 5) For capping information as applicable, refer to Standard Detail 1009.
- 6) For specification information, refer to City of Riverside Park and Recreation Department Standard Specifications, Section 02450 Planting.
- 7) Provide Fertilizer Tablets as follows:



B	DOUBLE STAKE TREE
---	-------------------

Determine the correct number of panels to be used. Depending upon the actual planting plan and the number of trees involved the length of linear barrier will vary, but as a general rule of thumb take the anticipated mature canopy diameter of the tree and add 2 feet (61cm). This will be the number of feet necessary for a Linear style planting application. (See chart below.)

D. Next place the barrier in the trench with the vertical ribs facing toward the tree and align in a straight fashion. It is helpful to place the barrier against the hardscape. Use the hardscape as a guide and backfill against the barriers to promote a clean smooth fit to the hardscape. Be sure to keep the barrier's double top edge at least 1/2" (13mm) above grade to ensure roots do not grow over the top.

A. Choose the barrier that best suits the application. Generally if a sidewalk, patio or driveway is to be protected, 18" (46cm) (LB 18-2) is sufficient depth with 12" (30cm) (LB 12-2) as an alternate choice for non-aggressive, deeper rooting trees. However for curb and gutter protection or more aggressive roots 24" (61cm) (UB 24-2) is generally the better choice.

B. Dig the trench to the depth based upon the particular barrier chosen.

C. Install the barrier. When using DeepRoot Linear Barriers simply pull the appropriate number of panels out of the box (they come preassembled) and separate the joist at the correct length. When installing DeepRoot Universal Barriers in a linear fashion you will need to join the appropriate number of panels together.

E. Plant the tree(s). The Linear style offers a more expansive rooting growth area, however adverse soil and drainage conditions may exist in the actual planting area. Take steps to ensure healthy growth of the tree at planting. Consult with a local Arborist for planting tips and recommendations.

F. If the tree(s) will be subject to maintenance work such as lawn mowing or weed trimming we strongly recommend the installation of ArborGard+ Tree Trunk Protectors which is placed around the base of young trees to protect them from damage by weed trimmers, lawn mowers and small rodents.

For additional information please consult the 16 page DeepRoot Product Selection and Installation Guidelines.

For information regarding distributors please call: 1 800 ILV ROOT (458.7668). For help with difficult drainage or other difficult installation questions please call DeepRoot Technical Support at: 1 800 ROOT TEK (766.8835).

For a simple formula to determine the quantity of panels required for a linear application use:
 Estimated Diameter of the Tree Canopy at Maturity + 2' (61cm) = Length of E

As little as one side of the tree may need barrier for root direction as there may be no hardscape elsewhere requiring protection.

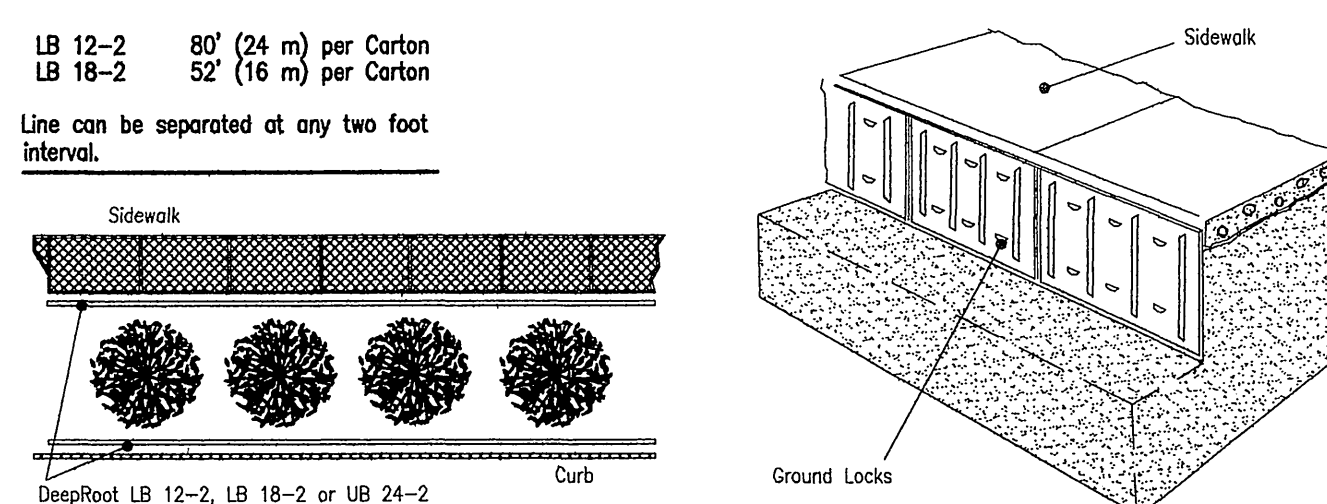
Note: Linear Barriers (LB 12-2 and LB 18-2) are packaged in 2' (61cm) long panels with pre-attached flexible joiners ready to pull out of the carton and install in one continuous line of use to:

LB 12-2 80' (24 m) per Carto
LB 18-2 52' (16 m) per Carto

Line can be separated at any two foot
interval

Expected Tree Canopy at Maturity	Number of Feet of Linear Barrier (LB 12 or LB 18)	Optional Universal Barrier (UB) in number of Panels
12' (3.6m) Diameter +2' (61cm) = 14' (4.2m)		7 Panels
18' (5.5m) Diameter +2' (61cm) = 20' (6.1m)		10 Panels
24' (7.3m) Diameter +2' (61cm) = 26' (7.9m)		13 Panels

DeepRoot LB 12-2, LB 18-2 or UB 24-2



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3612 MISSION INN AVE
RIVERSIDE, CALIFORNIA
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MARK	REVISIONS			APPR. DATE
DESIGNED BY	—	DRAWN BY	—	CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE	APPROVED BY
DEPUTY P.W. DIRECTOR			<i>Tom B...</i>
PRINCIPAL ENGINEER	<i>PH</i>	<i>10/16/03</i>	PUBLIC WORKS DIRECTOR
CHIEF P.W. INSPECTOR			
STREET SERVICES			
SURVEYOR			
TRAFFIC DIVISION			DATE <i>10/16/03</i>

LANDSCAPE IMPROVEMENT PLANS
TRACT 30717 LMD
PLANNING AREA 5A\5B
PLANTING DETAILS

HORIZ. SCALE: NTS VERT. SCALE: NTS

AN. NO:

R-3071-L
10 OF **11**

DRAWING 1 -10

